National Environmental Methods Index for Chemical, Biological, and Radiological Methods

Herb Brass
Co-Chair, Methods and Data Comparability
U.S. EPA Office of Water (OW), Office of Ground Water and Drinking Water (OGWDW), Technical Support Center
(513) 569-7936
brass.herb@epa.gov

Authors: Herb Brass[1], Steven C. Allgeier[2], Daniel J. Sullivan[3], Lawrence H. Keith[4], Jerome M. Diamond[5], Chad E. Barbour[5], Eric Vowinkel[6]
[1]U.S. EPA OW/OGWDW, Technical Support Center
[2]U.S. EPA OW/OGWDW, Water Security Division
[3]U.S. Geological Survey, Wisconsin Water Science Center
[4]Instant Reference Sources, Inc.
[5]Tetra Tech, Inc.
[6]U.S. Geological Survey, New Jersey Water Science Center

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After the terrorist attacks of September 11, 2001, the United States began to evaluate the security of the many layers of infrastructure that protect our health and well-being, including the safety of the nation's public water supplies. In case of actual or suspected water contamination, identification and analytical confirmation of the contaminant can be important for effective emergency response. Although it is neither possible nor necessary to plan for an attack involving all potential contaminants, the World Health Organization advises water suppliers to target preparations and training on a limited but well-chosen subgroup, thus providing the necessary capability to deal with a far wider range of potential contaminants.

To enhance the ability to quickly and effectively analyze and identify contaminants, the U.S. Environmental Protection Agency's (U.S. EPA) Water Security Division, located in the OGWDW, has overseen the development of two tools to aid in the protection of public water supplies: National Environmental Methods Index – Chemical, Biological, Radiological Methods (NEMI-CBR) and a companion expert system, the CBR Methods Advisor. NEMI-CBR, an extension of the National Environmental Methods Index (NEMI), is a compendium of analytical methods for chemical, biological, and radiological contaminants that could pose a threat to public water supplies. The NEMI is a free, searchable, Internet-based database of environmental methods (http://www.nemi.gov/) that effectively presents methods and related information in a manner that allows quick comparison of critical fields of method performance, cost, and other r+equirements. The CBR Methods Advisor can help a user to quickly and safely assess a threat, evaluate the site, collect samples, and select the best methods for a situation in which limited information is available regarding the possible identity of a contaminant.

The NEMI-CBR and CBR Advisor are meant to be used by water utilities, public and private labs, and emergency responders for training as well as immediate response to a water security

emergency. These databases will allow for the kind of quick and comprehensive response needed during emergency events.